ABSTRACT OF THE DISCLOSURE

A laser beam emitted by a light source is incident on one of reflecting surfaces of a polygon mirror. The laser beam reflected by the reflecting surface is dynamically deflected in a main scanning direction due to the revolution of the polygon mirror and enters a scanning lens. The first surface of the scanning lens is provided with anti-reflection coating only when the following condition (1) is satisfied:

$$H/2 > |2\beta D(D - Rz_1)/Rz_1| \quad \cdots\cdots (1)$$

where "H" denotes the width of each reflecting surface of the polygon mirror in a auxiliary scanning direction, "β" denotes the incident angle [radian] of the laser beam on the reflecting surface of the polygon mirror in the auxiliary scanning direction, "D" denotes the distance between the reflecting surface and the first surface of the scanning lens, and "Rz_1" denotes the curvature radius of the first surface in an auxiliary scanning cross section.